Statement-II

Expected Energy Generation/Savings from various Non-Conventional Energy Systems and Devices installed up to 31-3-1993

Sl. No.	Programmes	Unit	Systems Installed	Expected Energy Generation/ Fuel Savings Per Year	
1	Family Size Biogas Plants	Nos.	1,763,000	5,700,000	Tonnes of wood
2	Community/Institutional/Night Soil Biogas Plants	Nos.	1,009		
3	Improved Chulhas	Nos.	14,505,000	10,100,000	Tonnes of wood
4	Solar Thermal Systems	Area in Sq. mtr.	247,000	167,000,000	KWH
5	Solar Cookers	Nos.	288,000	173,000	Tonnes of wood
6	Solar Photovoltair	KW	3,324	5,000,000	KWH
7	Wind Power	KW	53,930	107,600,000	KWh
8	Wind Pumps	Nos.	3,009	3,851	Tonnes of Diesel
9	Biomass Gasifiers	KW	9,500	725	Tonnes of Diesel
10	Bio-energy/Cogeneration	KW	6,000	21,600,000	KWh
11	Small Hydro Power	KW	93,440	490,000,000	KWh

Bagasse as a Source of Energy

2054. SHRI KAMAL MORARKA : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that India is the largest producer of sugarcane in the world ;

(b) whether it is a fact that Indian variety of sugarcane yields the maximum quantity of biomass in the form of Bagasse ;

(c) whether it is a fact that Bagasse is an environment friendly source of energy ;

(d) if so, what steps have been taken/ proposed to be taken to make best use of the vastly available potential of this source of energy ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES AND MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE. (SHRI S. KRISHNA KUMAR) : (a) No Sir. As per world sugarcane production data available for 1992, India is the second largest producer of sugarcane after Brazil.

(b) No comparative study regarding yield of bagage from Indian varieties of sugarcane *viz-a-viz* the varieties of sugarcane available elsewhere in the world has been carried out.

(c) and (d) Yes, Sir. Ministry of Non-conventional Energy Sources had constituted a Task Force to assist in the formulation of a National Programme on Biomass based Cogeneration. The recommendations of the Task Force pertaining to bagasse based congeneration in sugar mills were discussed in a National Workshop held recently. A National Programme is likely to be launched after detailed examination of the recommendations.

Use of Solar Power

2055. SHRI TINDIVANAM G. VENKANTRAMAN : Will the PRIME MINISTER be pleased to state :

(a) whether Government propose to encourage solar power for lighting and industrial consumption ;

(b) if so, the States where the solar power is being tapped ;

(c) whether Government also encourage wind mills for production of electric energy; and

(d) whether it is a fact that Rajasthan is ideally suited for the exploitation of this form of energy ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES AND MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE. (SHRI S. KRISHNA KUMAR) : (a) and (b) The Govt. propose to encourage solar photovoltaic power for lighting in rural and remote areas. However, the cost of solar power systems is presently 3—5 times to that of conventional power for industrial consumption. State-wise instalation of solar photovoltaic systems for lighting and other small power applications are given at Statement (*See* below).

(c) and (d) Yes, Sir. The Govt. is encouraging wind electric generators for generation of powers. Wind Surveys conducted so far in Rajasthan have not yet identified any potential site for wind power generation.

Statement

State-wise Status of Solar Photovoltaic Systems as on 31-3-93

Sl. No.	State	Street Light Nos.	Domestic Light Nos.	Community TV/Lights Nos.	Water Pumps Nos.	SPV Power Plants Nos. (KWP)
1	Andhra Pradesh	2,872	124	3	59	2 (12)
2	Arunachal Pradesh	453	43	13	7	1 (2)
3	Assam	98	98	22	—	1 (2)
4	Bihar	371	148	3	28	—
5	Goa	30	31	4	—	2 (1.72)
6	Gujarat	1,563	370	51	98	3 (14)
7	Haryana	342	2	53	9	1 (20)
8	Himachal Pradesh	196	454	9	10	—
9	Jammu & Kashmir	146	537	1	—	—
10	Karnataka	258	—	9	2	—
11	Kerala	307	230	24	4	1 (1)
12	Madhya Pradesh	5,258	373	45	48	1 (6)
13	Maharashtra	2,887	2,744	64	70	3 (6.44)
14	Manipur	357	224	—	2	5 (5)
15	Meghalaya	688	610	—	8	7 (15.5)
16	Mizoram	182	143	1	2	—
17	Nagaland	271	8	3	10	1 (6)
18	Orissa	1,815	258	77	51	5 (33,515)
19	Punjab	33	—	1	—	—
20	Rajasthan	5,426	—	97	4	4 (25)
21	Sikkim	88	147	3	2	—
22	Tamil Nadu	1,918	158	27	34	—
23	Tripura	207	624	139	109	9 (24.57)
24	Uttar Pradesh	2,161	6,699	130	160	25 (103)
25	West Bengal	758	150	2	10	1 (3)
26	A. & N. Islands	306	419	2	20	20 (104.12)
27	Chandigarh					
28	Dadra & Nagar Haveli					
29	Daman & Diu					
30	Delhi	71			9	1 (5)
31	Lakshadweep	134		1		2 (20)
32	Pondicherry					
	TOTAL	29,198	14,594	784	756	95(408,86)